

## **PROJECT STUDY REPORT (Roadside Safety Improvements)**

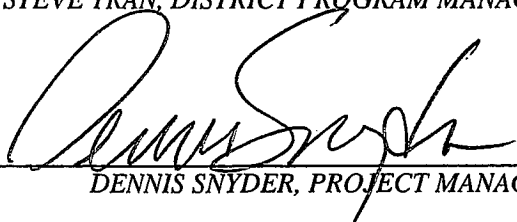
### **To Request Programming in 2012 SHOPP**

**PROJECT LOCATION:** In the cities of Los Angeles and Glendale on Route 2 from Round Top Drive to 0.1 mile north of Chevy Chase Drive and on Route 134 from Sinclair Ave to 0.3 miles east of Sierra Villa Drive


**APPROVAL RECOMMENDED:**

  
\_\_\_\_\_  
For STEVE TRAN, DISTRICT PROGRAM MANAGER

**APPROVAL RECOMMENDED:**

 9.8.11  
\_\_\_\_\_  
DENNIS SNYDER, PROJECT MANAGER

**APPROVED:**

  
\_\_\_\_\_  
MICHAEL MILES,  
DISTRICT 7 DISTRICT DIRECTOR

9-12-11  
\_\_\_\_\_  
DATE

07-LA-02- PM R17.8/R19.5

07-LA-134- PM 8.6/ 9.6

40.50.201.235

EA 29220K

September 2011

This Project Initiation Document has been prepared under the direction of the following licensed landscape architect. The licensed landscape architect attests to the technical information contained herein and the data upon which recommendations, conclusions, and decisions are based.

  
PATRICIA WATANABE  
LICENSED LANDSCAPE ARCHITECT

9/8/11  
DATE



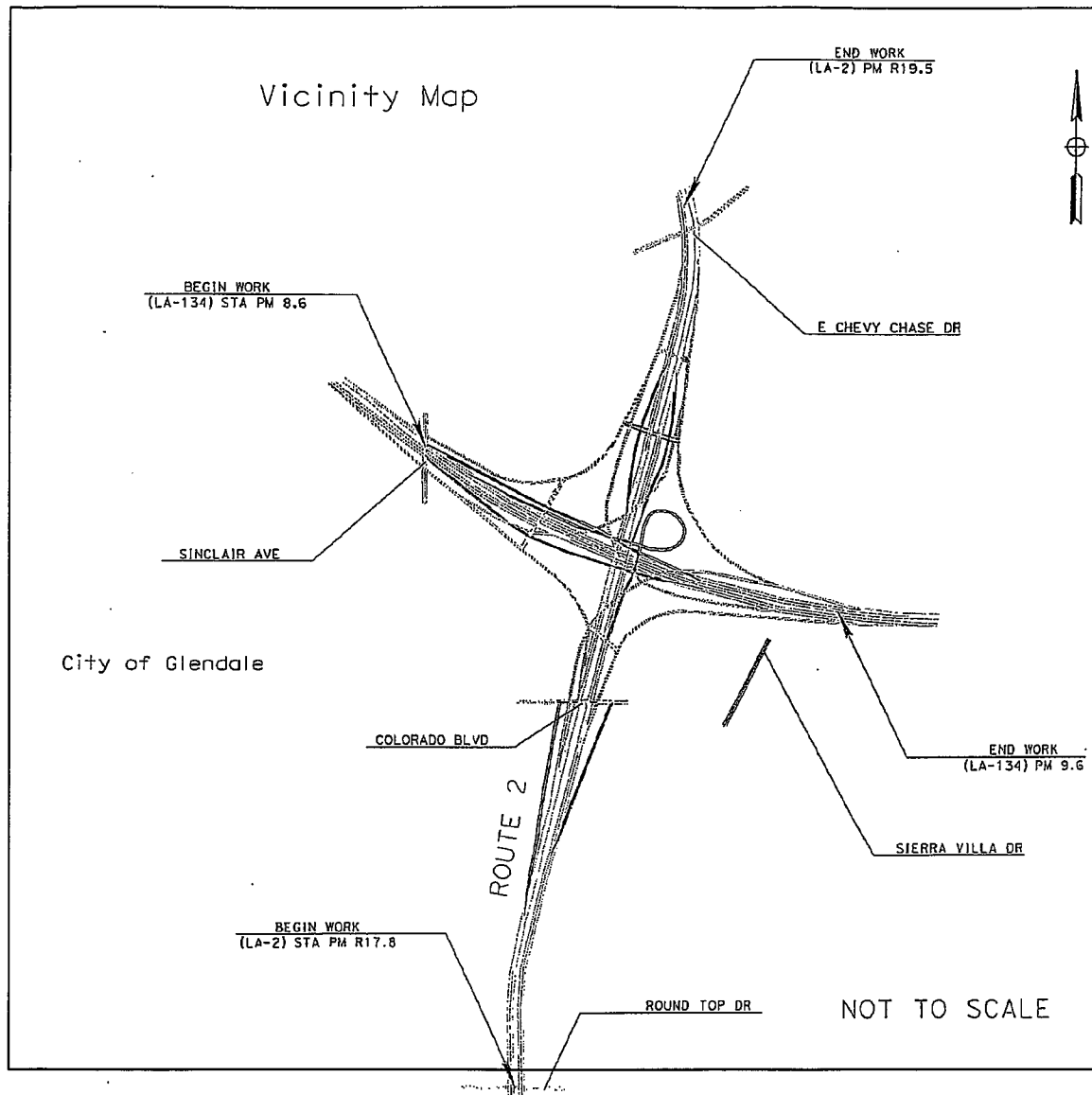
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**Initiating Office/Initiator:**

This project is initiated by Office of Design C, Landscape Architecture North Region / Patty Watanabe and Kathleen Ledesma.

The Program Manager for the Roadside Safety Improvement Program has established that a project is needed that meets the qualification for the 40.50.201.235 Program.

This project initiation document provides conceptual approval of the proposal and a recommendation to program the project into the 2012 State Highway Operation and Protection Program. A project report will serve as final approval of the proposal.

**Purpose and Need:**

**Purpose:** Minimize the frequency and duration of highway worker exposure to traffic by providing safe access and features to reduce repetitive maintenance activities. This proposed project will enhance worker safety at 18 locations within the State Right-of-Way by replacing difficult to access existing landscape with paving, extending paving in gore areas, installing Maintenance Vehicle Pullouts, installing access roads, installing slope paving and relocating existing irrigation facilities to more protected locations.

**Need:** Some landscaped areas are difficult to access and maintain due to proximity to traffic. This results in need for shoulder and/or lane closures and increased exposure to traffic. Also, there are locations that do not have direct accessibility for maintenance vehicles and this results in maintenance walking and carrying debris for lengthy and difficult distances. Many highway facilities are located directly adjacent to the mainline thus increasing Maintenance workers exposure to traffic when there is a maintenance need. Examples of this are existing irrigation controllers and irrigation heads located so close to traffic that they are often damaged by errant vehicles. Other facilities that expose Maintenance workers to mainline traffic include unpaved narrow areas along the mainline, untreated areas in the gore areas/underneath signage/guardrails that require herbicide application and/or weed control.

**Deficiency Summary:**

Various landscaped and weed infested gore/ median areas within the project limits are not safely accessible to maintenance without full lane closures. The current level of traffic significantly reduces the window of opportunity to consistently perform maintenance

activities to the point that overgrowth of vegetation at some locations is at the edge of the traveled way.

The landscape in the gore areas consist mostly of Oleander, Acacias, and various invasive species, which have exceeded life expectancy. Due to the lack of maintenance accessibility, much of the irrigation systems are no longer operational due to the lack of repair. Areas void of vegetation have become escape routes for drivers trying to avoid traffic backs, breaking existing irrigation facilities as well as A/C dikes in the process.

Landscape crews have tried to reduce the maintenance requirements in the gore and median areas by cutting the vegetation back and placing mulch between the shrubs and guardrails, but results do not last more than a year. The weeds are occasionally controlled with herbicide applications, but they continue to be a problem, still require manual labor for cleanup and removal.

### **Project Proposal:**

The best alternative to reduce worker exposure is to eliminate or reduce the existing landscape that is in areas that are inaccessible or unsafe for maintenance workers to reach. The scope of work to address this will include relocate irrigation facilities away from the traffic mainline, paving gore areas, extension of gore areas, paving inaccessible areas, and vegetation control mats under MBGR.

#### R/W (including utilities):

All work will be done within State right-of-way. There will be no relocation of utilities.

#### Hazardous Waste:

Possible ADL contamination. The extent will be determined during PS&E by the Hazardous Waste Report.

#### Stormwater:

The Corridor Stormwater Management Study for Rte 134 identifies 3 permanent BMPS within the project limits.

- 1- Earthen Media Filter
- 2 - Biofiltration Swales

#### Environmental:

This project does not have any environmental issues. A Categorical Exemption is the

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anticipated environmental determination/document during the PAED phase.

### Programming:

PROJECT CAPITAL COST		
Fiscal Year	Right of Way Capital	Construction Capital
2015	0	2,220,000

Key assumptions for the cost estimate:

	PROJECT SUPPORT COMPONENTS								
	PA&ED 0 Phase		Design 1 Phase		Right of Way 2 Phase		Construction 3 Phase		Total
	Dist	DES	Dist	DES	Dist	DES	Dist	DES	
Estimated PY's	0.27	0	1.1	0.1	0	0	1.67	0	3.14

Key assumptions for support cost estimate.

### Schedule:

HQ Milestones	Delivery Date (Month, Day, Year)
PA & ED	6/14/13
Regular Right of Way	N/A
Project PS&E	1/15/15
Right of Way Certification	3/15/15
Ready to List	4/15/15
Approve Contract	10/15/15
Contract Acceptance	8/15/16
End Project	2/15/17

Key assumptions for the schedule.

### Cost Estimate:

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<u>Access Work</u>	<u>Yes/No</u>	<u>Quantity</u> <u>(unit)</u>	<u>*Cost</u>
(A) Access Gates - Personnel	<u>Yes</u>	<u>1</u>	<u>\$1,300</u>
(B) Access Gates - Equipment	<u>Yes</u>	<u></u>	<u></u>
(C) Light Duty Access Trails	<u>Yes</u>	<u></u>	<u></u>
(a) All Weather Surface	<u></u>	<u></u>	<u></u>
(b) Graded Surface	<u></u>	<u></u>	<u></u>
(c) Aggregate base	<u>Yes</u>	<u>LS</u>	<u>\$10,000</u>
(D) Shoulder Widening/Turnouts**	<u></u>	<u></u>	<u></u>
(a) Paved Surface	<u>Yes</u>	<u>LS</u>	<u>\$90,000</u>
(b) All Weather Surface	<u></u>	<u></u>	<u></u>
(c) Graded Surface	<u></u>	<u></u>	<u></u>
(d) Aggregate base	<u>Yes</u>	<u>LS</u>	<u>\$20,000</u>
(E) Staircases	<u>No</u>	<u></u>	<u></u>
(F) Maintenance Vehicle Pullout	<u>Yes</u>	<u>4</u>	<u>\$32,000</u>
(#)	<u></u>	<u></u>	<u></u>
<b>COSTS SUBTOTAL</b>			<b><u>\$153,300</u></b>

<u>Vegetation Control Work</u>	<u>Yes/No</u>	<u>Quantity</u> <u>(unit)</u>	<u>*Cost</u>
(A) Vegetation control under Metal Beam Guard Rail	<u>Yes</u>	<u>LS</u>	<u>\$86,000</u>
(B) Vegetation control under Thrie Beam Barrier	<u>No</u>	<u></u>	<u></u>
(C) Vegetation control around sign posts	<u>Yes</u>	<u>LS</u>	<u>\$25,000</u>
(D) Paving narrow areas	<u>Yes</u>	<u>LS</u>	<u>\$230,000</u>
(E) Paving areas beyond the gore	<u>Yes</u>	<u>LS</u>	<u>\$680,000</u>
(#)	<u></u>	<u></u>	<u></u>
<b>COST SUBTOTALS</b>			<b><u>\$1,021,000</u></b>

<u>Facility Relocation Work</u>	<u>Yes/No</u>	<u>Quantity</u> <u>(unit)</u>	<u>*Cost</u>
(A) Pull boxes	<u>Yes</u>	<u>LS</u>	<u>\$1,000</u>
(B) Irrigation valve boxes	<u>Yes</u>	<u>LS</u>	<u>\$15,000</u>
(C) Backflow preventer assemblies	<u>Yes</u>	<u>LS</u>	<u>\$12,000</u>
(D) Electrical control boxes	<u>Yes</u>	<u>LS</u>	<u>\$18,000</u>
(E) Traffic control boxes	<u>No</u>	<u></u>	<u></u>
(F) Irrigation control boxes	<u>Yes</u>	<u>LS</u>	<u>\$20,000</u>
(G) Irrigation Supply Line	<u>Yes</u>	<u>LS</u>	<u>\$15,000</u>
(H) Sprinklers	<u>Yes</u>	<u>LS</u>	<u>\$ 5,000</u>
<b>COST SUBTOTALS</b>			<b><u>\$86,000</u></b>

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<u>Additional Work</u>	<u>Yes/No</u>	<u>Quantity</u> <u>(unit)</u>	<u>*Cost</u>
(A) Traffic Control	<u>Yes</u>	<u>LS</u>	<u>\$110,000</u>
(B) Earthwork***	<u>No</u>		
(C) Pavement****	<u>Yes</u>	<u>LS</u>	<u>\$50,000</u>
(include remove and replace)			
(D) Clearing and Grubbing	<u>Yes</u>	<u>LS</u>	<u>\$60,000</u>
(E) Other Landscape Related Work# (Mulch Replacement, etc.)	<u>Yes</u>	<u>LS</u>	<u>\$30,000</u>
(F) Guardrail (include remove and replace)	<u>No</u>		
(a) Metal Beam			
(b) Concrete			
(c) Bridge Approach			
(#)			
(G) Drainage Adjustment and Rehabilitation# (List type of work)	<u>No</u>		
(H) Retaining Walls	<u>No</u>		
(I) Utility Relocation	<u>No</u>		
(J) Railroad Agreements	<u>No</u>		
(K) Right of Way	<u>No</u>		
(L) Environmental Mitigation	<u>No</u>		
(M) Relocation of Materials	<u>Yes</u>	<u>LS</u>	<u>\$20,000</u>
(N) Other Work (Type)			
(a) Permanent Treatment BMPs	<u>Yes</u>	<u>2</u>	<u>\$180,000</u>
(b) Stormwater Construction	<u>Yes</u>	<u>LS</u>	<u>\$25,000</u>
Site BMPs			
(c) Resident Engineer Office	<u>Yes</u>	<u>LS</u>	<u>\$60,000</u>
<b>COST SUBTOTALS</b>			<b><u>\$515,000</u></b>
<b>SUM OF SUBTOTALS</b>			<b><u>\$1,775,300</u></b>
<b>25% Contingency</b>			<b><u>\$444,000</u></b>
<b>TOTAL PROJECT COST</b>			<b><u>\$2,219,300</u></b>
<b>TOTAL PROJECT COST(ROUNDED)</b>			<b><u>\$2,220,000</u></b>

Note: \* If duplicated in other items, show cost in parenthesis.  
 \*\* Include cost of shoulder backing material, as needed.  
 \*\*\* Earthwork other than that required for grading turnouts or access trails.  
 \*\*\*\* Pavement work other than that required for the Access or Vegetation Control work.  
 # Add Additional lines as necessary. Do not include support costs.